

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
30 November 2000 (30.11.2000)

PCT

(10) International Publication Number
WO 00/71711 A2

(51) International Patent Classification⁷: C12N 15/12,
C07K 14/47, C12Q 1/68, G01N 33/68, C12N 15/10

(74) Agent: SAATCIOGLU, Fahri; Fish & Associates, LLP,
Suite 706, 1440 N. Harbor Boulevard, Fullerton, CA 92835
(US).

(21) International Application Number: PCT/IB00/00673

(22) International Filing Date: 19 May 2000 (19.05.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/135,325 20 May 1999 (20.05.1999) US
60/135,333 20 May 1999 (20.05.1999) US

(71) Applicant and

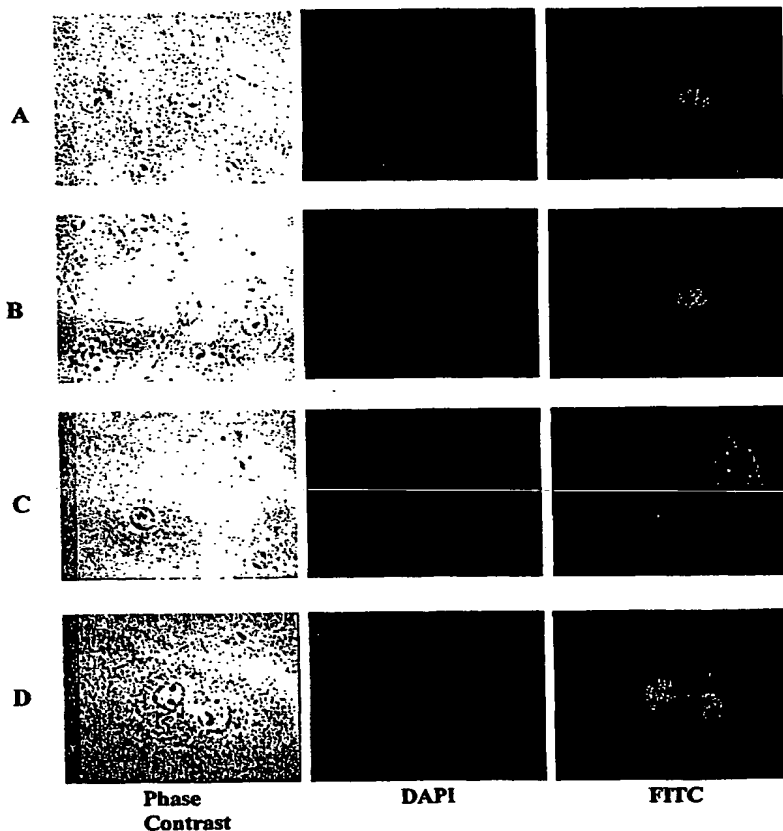
(72) Inventor: SAATCIOGLU, Fahri [TR/NO]; University Of
Oslo, Biotechnology Center Of Oslo, Gaustadalleen 21,
P.O. Box 1125, N-1317 Blindern (NO).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AT
(utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH,
CN, CR, CU, CZ, CZ (utility model), DE, DE (utility
model), DK, DK (utility model), DM, DZ, EE, EE (utility
model), ES, FI, FI (utility model), GB, GD, GE, GH, GM,
HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
SK (utility model), SL, TJ, TM, TR, TT, TZ, UA, UG, US,
UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,

[Continued on next page]

(54) Title: DIFFERENTIALLY EXPRESSED GENES IN PROSTATE CANCER



(57) Abstract: SEQ ID NO:1, SEQ ID NO:2, and SEQ ID NO:3 encode an intracellular protein that is expressed in prostate epithelial cells in a hormone dependent manner. Encoded proteins SEQ ID NO:4, SEQ ID NO:5, and SEQ ID NO:6 have predominantly perinuclear, nuclear and predominantly nuclear location localization within a cell, respectively. In contemplated methods of detecting a neoplastic cell in a system, a predetermined amount of at least one of SEQ ID NO:4, SEQ ID NO:5, and SEQ ID NO:6, or at least one of SEQ ID NO:7, SEQ ID NO:8, and SEQ ID NO:9 is correlated with the presence of a neoplastic cell and detected within the system employing specific binding of a labeled probe. In a method of identifying differentially expressed genes, a tissue specific array of cDNA prepared by suppression subtractive hybridization is arranged on a solid phase. Two nucleic acid preparations are individually hybridized with the array, wherein the first and second nucleic acid preparations are prepared from treated and untreated target tissue. A comparison of the hybridization patterns reveals differentially expressed genes.

WO 00/71711 A2



IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— Without international search report and to be republished upon receipt of that report.